

Title (en)  
Heat treatment of liquids.

Title (de)  
Wärmebehandlung von Flüssigkeiten.

Title (fr)  
Traitement de chaleur de liquides.

Publication  
**EP 0118308 A1 19840912 (EN)**

Application  
**EP 84301449 A 19840305**

Priority  
GB 8305873 A 19830303

Abstract (en)  
A vacuum vessel (51, 1) with heating jacket (52, 5) around its upper part is fed at one or more nozzles (54, 3) with a coherent or atomised stream(s) of heated liquid e.g. waste oil which impinges generally tangentially on its inner surface. Flash evaporation takes place, together with further evaporation from the liquid running around and down the internal vessel wall to the pool of residual liquid in the base of the vessel (51, 1) Baffles (12, 13) shown in Figure 2, protect large axial vapour outlet (9) from carryout of liquid droplets. The vapour is condensed in large-diameter large-surface condenser (64, 6) connected to vacuum pump (67) for the system and liquid collects at (69, 11) Offtake pipe 55 recycles residual liquid to the nozzle as rapid preheat to new feed from 58.

IPC 1-7  
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IPC 8 full level  
**B01D 1/30** (2006.01); **B01D 3/06** (2006.01); **B01D 5/00** (2006.01); **C10M 175/00** (2006.01)

CPC (source: EP)  
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Citation (search report)  
• [Y] GB 636324 A 19500426 - BUCKEYE LAB CORP  
• [Y] US 4158092 A 19790612 - BOTSCH FRANZ [DE], et al  
• [Y] DE 695202 C 19400911 - BERGEDORFER EISENWERK AG  
• [A] GB 1467570 A 19770316 - KAO CORP  
• [A] US 2994647 A 19610801 - WILLIAMSON WILLIAM R, et al

Cited by  
EP0235421A1; CN116173540A; EP0273616A3; US6685802B1; WO0117639A1

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